

59313

Accession DB#

Search Request Form

Scientific and Technical Information Center

Requester's Full Name: L. Eric Crane Examiner #: 65753 Date: 01/30/02
Art Unit: 1623 Phone Number: 808-4639 Serial No. 09/759,965
Mail Box / & Bldg/Room Loc: 8D-14/CM-1 Results Format Preferred: PAPER
[8B-19/CM-1]

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, key words, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known. Please attach a copy of the cover sheet, pertinent claims, and/or abstract..

Title of Invention: See attached copy of claims.
Inventors (please provide full names): See attached copy of claims.
Earliest Priority Filing Date: 01/12/01

**For Sequence Searches only* Please include all of the pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Please search for compositions containing glucosamine (aka 2-deoxy-2-aminoglucose) and chondroitin (see claim 4) together with a sweetener (see claim 3 and claim 6) or CH₃-SO₂-CH₃, or gelatin, or cartilage or S-adenosylmethionine (SAME) (see claim 1)

POINT OF CONTACT:
PAUL SCHULWITZ
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CM1 12C14 TEL. (703) 235-1004

STAFF USE ONLY

	Type of Search	Vendors/cost applicable
Searcher: <u>Paul Schulw. 47</u>	NA Sequence(#) _____	STN <u>✓</u>
Searcher Phone #: _____	AA Sequence(#) _____	Dialog _____
Searcher Location: _____	Structure (#) <u>2</u>	Questel/Orbit _____
Date Searcher Picked Up: <u>2/1</u>	Bibliographic _____	Dr. Link _____
Date Completed: <u>2/4</u>	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: <u>30</u>	Full Text _____	Seq.Syst'ms _____
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____
Online Time: _____	Other _____	Other(Specify) _____

RECEIVED
JAN 30 2002

WHAT IS CLAIMED IS:

1. A composition comprising:

- a) a chondroprotective agent selected from the group consisting of gelatin, cartilage, aminosugars, glycosaminoglycans, methylsulfonylmethane, precursors of methylsulfonylmethane, S-adenosylmethionine, and mixtures thereof;
- b) a sweetening agent other than glucose, dextrose, sucrose, and fructose; and
- c) at least about 10% water, by weight of the composition.

2. A composition according to Claim 1 wherein the chondroprotective agent is selected from the group consisting of aminosugars, glycosaminoglycans, S-adenosylmethionine, and mixtures thereof.

3. A composition according to Claim 2 wherein the sweetening agent is selected from the group consisting of sorbitol, mannitol, xylitol, erythritol, malitol, maltose, lactose, fructooligosaccharides, lo han guo, ~~stevioside~~, acesulfame, aspartame, sucralose, saccharin, xylose, arabinose, levulose, isomalt, and ribose.

L66
OK
L85

4. A composition according to Claim 3 wherein the chondroprotective agent is selected from the group consisting of aminosugars, glycosaminoglycans, and mixtures thereof and wherein:

- a) the aminosugars are selected from the group consisting of glucosamine and salts thereof; and
- b) the glycosaminoglycans are selected from the group consisting of chondroitin and salts thereof.

5. A composition according to Claim 4 further comprising at least one sweetener selected from the group consisting of sucrose, fructose, and mixtures thereof.

6. A composition according to Claim 5 further comprising a caloric sweetener selected from the group consisting of glucose, dextrose, sucrose, fructose, and mixtures thereof.

7. A composition according to Claim 4 wherein the sweetening agent is selected from the group consisting of xylitol, erythritol, fructooligosaccharides, lo han guo, stevioside, acesulfame, aspartame, sucralose, and mixtures thereof.
8. A composition according to Claim 7 wherein the sweetening agent is selected from the group consisting of erythritol, sucralose, and mixtures thereof.
9. A composition according to Claim 8 further comprising one or more beverage components selected from the group consisting of fruit juice, tea, milk solids, and mixtures thereof.
10. A composition according to Claim 9 comprising at least about 75% water, by weight of the composition.
11. A composition according to Claim 10 further comprising one or more nutrients.
12. A composition according to Claim 10 further comprising one or more omega-3-fatty acids.
13. A composition comprising:
 - a) a chondroprotective agent selected from the group consisting of gelatin, cartilage, aminosugars, glycosaminoglycans, methylsulfonylmethane, precursors of methylsulfonylmethane, S-adenosylmethionine, salts thereof, and mixtures thereof; and
 - b) a sweetening agent other than glucose, dextrose, sucrose, and fructose;wherein the composition is substantially free of aspartame.
14. A composition according to Claim 13 wherein the chondroprotective agent is selected from the group consisting of aminosugars, glycosaminoglycans, S-adenosylmethionine, and mixtures thereof.
15. A composition according to Claim 14 wherein the sweetening agent is selected from the group consisting of sorbitol, mannitol, xylitol, erythritol, malitol, maltose, lactose, fructooligosaccharides, lo han guo, stevioside, acesulfame, aspartame, sucralose, saccharin, xylose, arabinose, levulose, isomalt, and ribose.

16. A composition according to Claim 15 wherein the chondroprotective agent is selected from the group consisting of aminosugars, glycosaminoglycans, and mixtures thereof and wherein:
 - a) the aminosugars are selected from the group consisting of glucosamine and salts thereof; and
 - b) the glycosaminoglycans are selected from the group consisting of chondroitin and salts thereof.
17. A composition according to Claim 16 further comprising at least one sweetener selected from the group consisting of sucrose, fructose, and mixtures thereof.
18. A composition according to Claim 17 further comprising a caloric sweetener selected from the group consisting of glucose, dextrose, sucrose, fructose, and mixtures thereof.
19. A composition according to Claim 16 wherein the sweetening agent is selected from the group consisting of xylitol, erythritol, fructooligosaccharides, lo han guo, stevioside, acesulfame, aspartame, sucralose, and mixtures thereof.
20. A composition according to Claim 19 wherein the sweetening agent is selected from the group consisting of erythritol, sucralose, and mixtures thereof.
21. A composition according to Claim 20 further comprising one or more beverage components selected from the group consisting of fruit juice, tea, milk solids, and mixtures thereof.
22. A composition comprising:
 - a) a chondroprotective agent selected from the group consisting of gelatin, cartilage, aminosugars, glycosaminoglycans, methylsulfonylmethane, precursors of methylsulfonylmethane, S-adenosylmethionine, salts thereof, and mixtures thereof;
 - b) at least about 10% water, by weight of the composition; and
 - c) less than about 19 grams total carbohydrate per every 230 milliliters of the composition.

23. A composition according to Claim 22 wherein the chondroprotective agent is selected from the group consisting of aminosugars, glycosaminoglycans, S-adenosylmethionine, and mixtures thereof.
24. A composition according to Claim 23 comprising a sweetening agent selected from the group consisting of sorbitol, mannitol, xylitol, erythritol, malitol, maltose, lactose, fructooligosaccharides, lo han guo, stevioside, acesulfame, aspartame, sucralose, saccharin, xylose, arabinose, levulose, isomalt, and ribose.
25. A composition according to Claim 24 wherein the chondroprotective agent is selected from the group consisting of aminosugars, glycosaminoglycans, and mixtures thereof and wherein:
 - a) the aminosugars are selected from the group consisting of glucosamine and salts thereof; and
 - b) the glycosaminoglycans are selected from the group consisting of chondroitin and salts thereof.
26. A composition according to Claim 25 further comprising at least one sweetener selected from the group consisting of sucrose, fructose, and mixtures thereof.
27. A composition according to Claim 26 further comprising a caloric sweetener selected from the group consisting of glucose, dextrose, sucrose, fructose, and mixtures thereof.
28. A composition according to Claim 27 comprising less than about 18.5 grams total carbohydrate per every 230 milliliters of the composition.
29. A composition according to Claim 28 further comprising one or more beverage components selected from the group consisting of fruit juice, tea, milk solids, and mixtures thereof.
30. A composition according to Claim 28 comprising less than about 18 grams total carbohydrate per every 230 milliliters of the composition.
31. A composition according to Claim 30 comprising at least about 75% water, by weight of the composition.

32. A composition according to Claim 31 further comprising one or more nutrients.
33. A composition according to Claim 31 further comprising one or more omega-3-fatty acids.
34. A composition comprising:
- a) a chondroprotective agent selected from the group consisting of gelatin, cartilage, aminosugars, glycosaminoglycans, methylsulfonylmethane, precursors of methylsulfonylmethane, S-adenosylmethionine, salts thereof, and mixtures thereof; and
 - b) less than about 18 grams total carbohydrate per every 230 milliliters of the composition;
- wherein the composition is substantially free of aspartame.
35. A composition according to Claim 34 wherein the chondroprotective agent is selected from the group consisting of aminosugars, glycosaminoglycans, S-adenosylmethionine, and mixtures thereof.
36. A composition according to Claim 35 comprising a sweetening agent selected from the group consisting of sorbitol, mannitol, xylitol, erythritol, malitol, maltose, lactose, fructooligosaccharides, lo han guo, stevioside, acesulfame, aspartame, sucralose, saccharin, xylose, arabinose, levulose, isomalt, and ribose.
37. A composition according to Claim 36 wherein the chondroprotective agent is selected from the group consisting of aminosugars, glycosaminoglycans, and mixtures thereof and wherein:
- a) the aminosugars are selected from the group consisting of glucosamine and salts thereof; and
 - b) the glycosaminoglycans are selected from the group consisting of chondroitin and salts thereof.
38. A composition according to Claim 37 further comprising at least one sweetener selected from the group consisting of sucrose, fructose, and mixtures thereof.

39. A composition according to Claim 38 further comprising a caloric sweetener selected from the group consisting of glucose, dextrose, sucrose, fructose, and mixtures thereof.
40. A composition according to Claim 39 comprising less than about 18.5 grams total carbohydrate per every 230 milliliters of the composition.
41. A composition according to Claim 40 further comprising one or more beverage components selected from the group consisting of fruit juice, tea, milk solids, and mixtures thereof.
42. A composition according to Claim 41 comprising less than about 18 grams total carbohydrate per every 230 milliliters of the composition.
43. A kit comprising:
- (a) a composition according to Claim 1; and
 - (b) information that use of the composition is useful for one or more benefits selected from the group consisting of joint health benefits, bone health benefits, anti-inflammation, and utility for diabetic mammals.
44. A kit comprising:
- (a) a composition according to Claim 13; and
 - (b) information that use of the composition is useful for one or more benefits selected from the group consisting of joint health benefits, bone health benefits, anti-inflammation, and utility for diabetic mammals.
45. A kit comprising:
- (a) a composition according to Claim 22; and
 - (b) information that use of the composition is useful for one or more benefits selected from the group consisting of joint health benefits, bone health benefits, anti-inflammation, and utility for diabetic mammals.

46. A kit comprising:
 - (a) a composition according to Claim 34; and
 - (b) information that use of the composition is useful for one or more benefits selected from the group consisting of joint health benefits, bone health benefits, anti-inflammation, and utility for diabetic mammals.
47. A method of treating a condition selected from the group consisting of joint dysfunction, bone dysfunction, and inflammation comprising orally administering to a mammal a composition according to Claim 1.
48. A method of treating a condition selected from the group consisting of joint dysfunction, bone dysfunction, and inflammation comprising orally administering to a mammal a composition according to Claim 13.
49. A method of treating a condition selected from the group consisting of joint dysfunction, bone dysfunction, and inflammation comprising orally administering to a mammal a composition according to Claim 22.
50. A method of treating a condition selected from the group consisting of joint dysfunction, bone dysfunction, and inflammation comprising orally administering to a mammal a composition according to Claim 34.

Inventor Search

09/759,965

February 4, 2002

L34 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2002 ACS

AN 2001:903816 HCAPLUS

DN 136:42843

TI Compositions, kits, and methods for promoting defined health benefits

IN Kern, Kenneth Norman; Heisey, Matthew Thomas

PA The Procter + Gamble Company, USA

SO PCT Int. Appl., 45 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

← 2 of inventors

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001093847	A2	20011213	WO 2001-US17714	20010601
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

PRAI US 2000-586213 A 20000602

US 2001-760280 A 20010112

AB The present invention is directed to compns. comprising: (a) a first component selected from the group consisting of **gelatin**, **cartilage**, amino sugars, **glycosaminoglycans**, methylsulfonylmethane, precursors of methylsulfonylmethane, S-adenosylmethionine, salts and mixts.; and (b) a second component comprising a cation source selected from the group consisting of calcium, potassium, magnesium, and mixts. and an edible acid source. The present invention is further directed to food, beverage, pharmaceutical, over-the-counter, and dietary supplement products, which comprise the present compns. The invention also relates to kits comprising the present compns. and information that use of the compn. promotes one or more of the presently defined health benefits, including joint health, bone health, cardiac health, and anti-inflammation. The present invention addnl. relates to methods of treating joint function, bone function, cardiac function, or inflammation comprising administering to a mammal a compn. as defined herein. Thus, hard lemon candies are prepd. by combining the following components as indicated: sugar 200, light corn syrup 63, water 60, lemon flavor glucosamine-HCl 16, and calcium citrate malate 14.9 g.

IT 66-84-2, Glucosamine hydrochloride 67-71-0, Methylsulfonylmethane 29031-19-4, Glucosamine sulfate 29908-03-0 216699-44-4

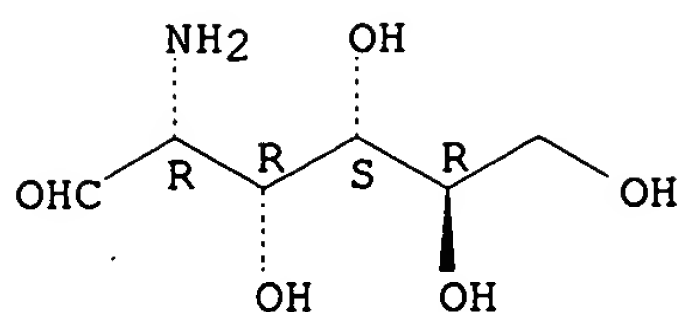
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(compns. and kits for promoting defined health benefits)

RN 66-84-2 HCAPLUS

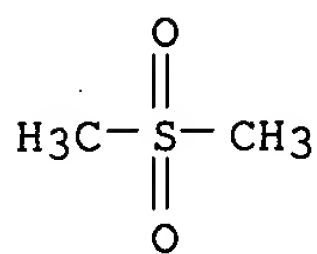
CN D-Glucose, 2-amino-2-deoxy-, hydrochloride (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



● HCl

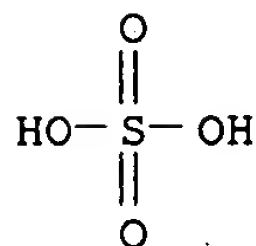
RN 67-71-0 HCAPLUS
CN Methane, sulfonylbis- (9CI) (CA INDEX NAME)



RN 29031-19-4 HCAPLUS
CN D-Glucose, 2-amino-2-deoxy-, sulfate (salt) (8CI, 9CI) (CA INDEX NAME)

CM 1

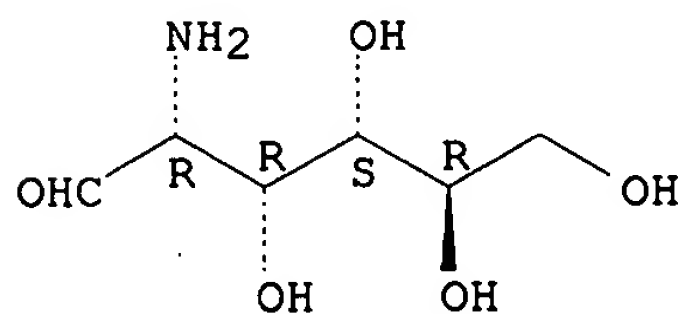
CRN 7664-93-9
CMF H2 O4 S



CM 2

CRN 3416-24-8
CMF C6 H13 N O5

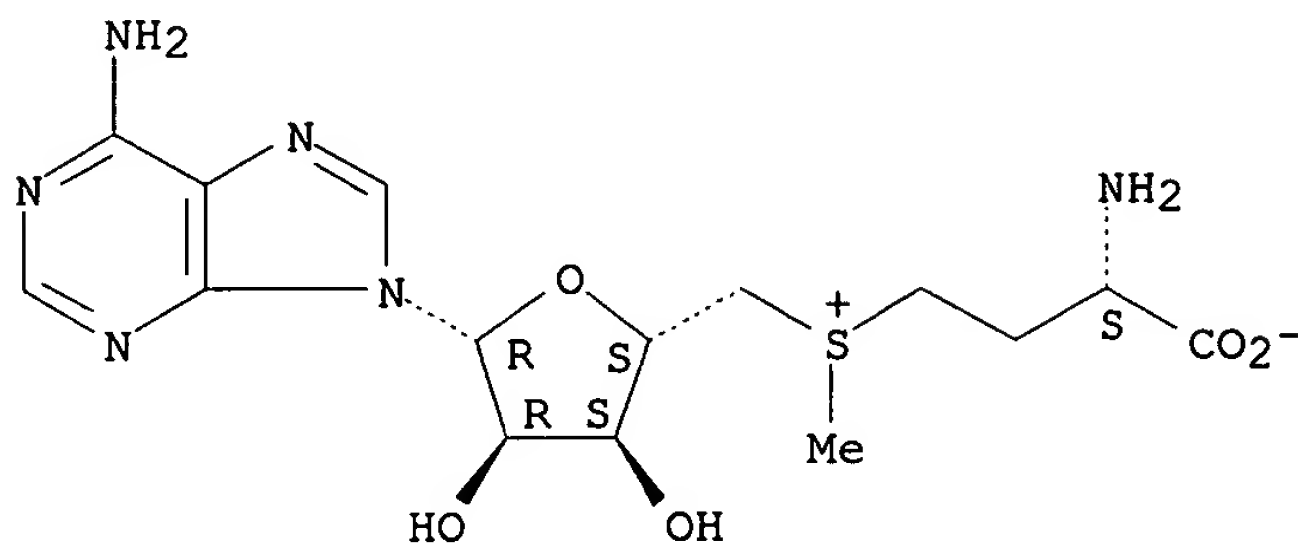
Absolute stereochemistry. Rotation (+).



RN 29908-03-0 HCAPLUS
CN Adenosine, 5'-[[(3S)-3-amino-3-carboxypropyl]methylsulfonio]-5'-deoxy-,

inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 216699-44-4 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, sulfate (salt), compd. with potassium chloride (KCl) (2:1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 7447-40-7

CMF Cl K

Cl-K

CM 2

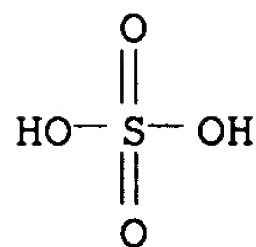
CRN 14999-43-0

CMF C6 H13 N O5 . 1/2 H2 O4 S

CM 3

CRN 7664-93-9

CMF H2 O4 S

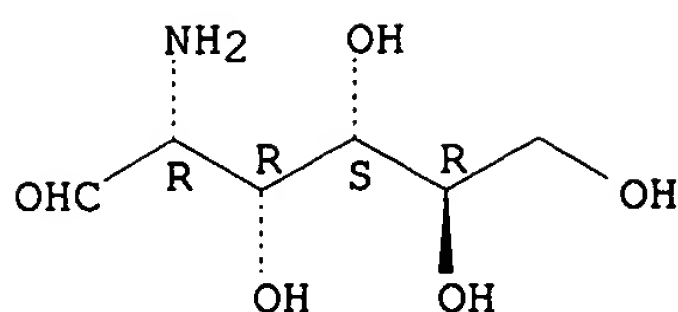


CM 4

CRN 3416-24-8

CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).



L34 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2002 ACS

AN 2001:903788 HCAPLUS

DN 136:19486

TI Kits and methods for optimizing the efficacy of chondroprotective compositions

IN Sarama, Robert Joseph; Harris, Judith Lynn; Spence, Kris Eugene

PA The Procter + Gamble Company, USA

SO PCT Int. Appl., 40 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001093833	A2	20011213	WO 2001-US17721	20010601
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

PRAI US 2000-586514 A 20000602

AB The present invention is directed to kits which are useful for promoting one or more health benefits including, for example, joint health, bone health, cardiac health, and/or anti-inflammation. In particular, the present kits comprise: (a) a compn. comprising one or more chondroprotective agents and water; and (b) information selected from the group consisting of: (i) dose-form information; (ii) instruction or suggestion of ingestion of the compn. within about 4 h of ingestion of a food or beverage; and (iii) combinations thereof. The chondroprotective agent is selected from **gelatin, cartilage**, amino sugars, **glycosaminoglycans**, methylsulfonylmethane, precursors of methylsulfonylmethane, S-adenosylmethionine, and their salts. The present invention is further directed to kits comprising: (a) a compn. comprising one or more chondroprotective agents and at least about 80% water; and (b) a sep. food or beverage. The present invention also relates to methods of enhancing a benefit assocd. with a compn. comprising one or more chondroprotective agents and water, the method comprising administering to a mammal the compn. within about 4 h of administration of a food or beverage. For example, a ready-to-drink beverage compn. was prepd. contg. (by wt.) glucosamine-HCl 3.2%, fructose 9.3%, thickener 0.04%, calcium citrate maleate 2.3%, natural flavors 0.02%, ascorbic acid 0.16%, citric acid 0.35%, and water up to 100%.

IT 66-84-2, Glucosamine hydrochloride 67-71-0,

Methylsulfonylmethane 29908-03-0

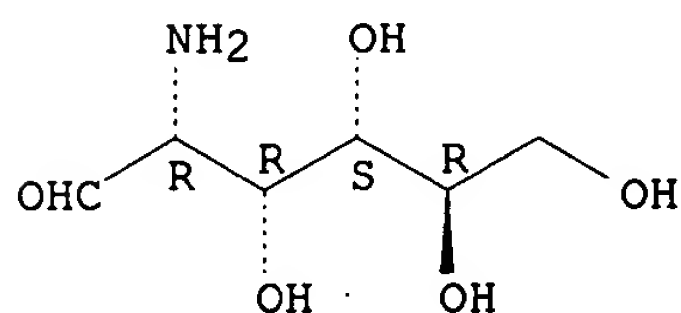
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(kits and methods for optimizing the efficacy of chondroprotective compns.)

RN 66-84-2 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, hydrochloride (8CI, 9CI) (CA INDEX NAME)

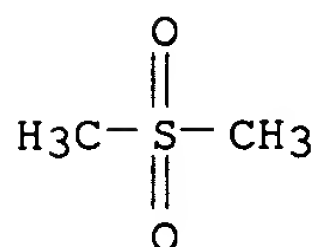
Absolute stereochemistry. Rotation (+).



● HCl

RN 67-71-0 HCAPLUS

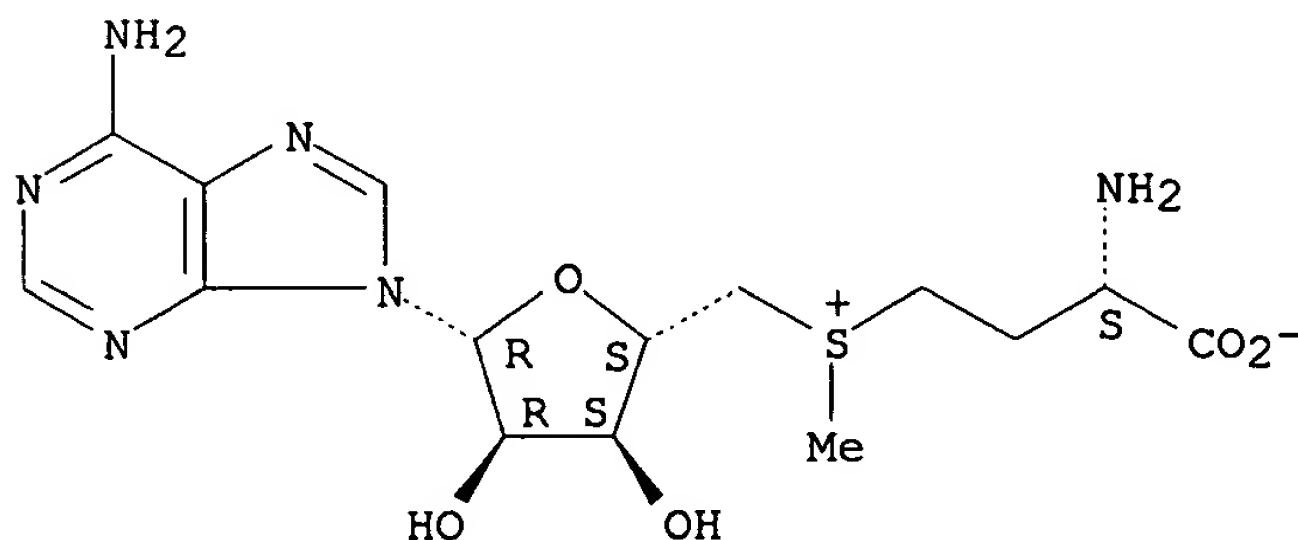
CN Methane, sulfonylbis- (9CI) (CA INDEX NAME)



RN 29908-03-0 HCAPLUS

CN Adenosine, 5'-[[(3S)-3-amino-3-carboxypropyl]methylsulfonio]-5'-deoxy-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L34 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2002 ACS

AN 2001:903784 HCAPLUS

DN 136:19484

TI Low carbohydrate compositions, kits thereof, and methods of use

IN Heisey, Matthew Thomas; Kern, Kenneth Norman;

Spence, Kris Eugene
 PA The Procter + Gamble Company, USA
 SO PCT Int. Appl., 37 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 2

*PCT equivalent
 No Search Report*

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001093831	(A2)	20011213	WO 2001-US17716	20010601
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			

PRAI US 2000-586514 A 20000602
 US 2001-759965 A 20010112

AB The present invention relates to compns., kits, and methods utilized for the treatment of joint dysfunction, bone dysfunction, and/or inflammation. The compn. utilized herein are useful for those mammals experiencing painful or debilitating joint, bone, or inflammatory conditions, and are particularly suited for mammals which are diabetic or at risk for diabetes, as well as those desiring or requiring conveniently dosed chondroprotective compns. having low carbohydrate content, low caloric value and/or having a low glycemic index. In particular, the present compns. comprise: (a) a chondroprotective agent selected from **gelatin, cartilage, aminosugars, glycosaminoglycans, methylsulfonylmethane, precursors of methylsulfonylmethane, S-adenosylmethionine, and mixts. thereof; (b) a sweetening agent other than glucose, dextrose, sucrose, and fructose; and (c) at least about 10 water, by wt. of the compn.** In an alternative embodiment of the present invention, the present compns. comprise: (a) a chondroprotective agent selected from **gelatin, cartilage, aminosugars, glycosaminoglycans, methylsulfonylmethane, precursors of methylsulfonylmethane, S-adenosylmethionine, salts thereof, and mixts. thereof; and (b) a sweetening agent other than glucose, dextrose, sucrose, and fructose; wherein the compn. is substantially free of aspartame.** Other compns. of the present invention comprise a chondroprotective agent selected from **gelatin, cartilage, aminosugars, glycosaminoglycans, methylsulfonylmethane, precursors of methylsulfonylmethane, S-adenosylmethionine, and mixts. thereof, and have a low carbohydrate content, as defined herein.** For example, a low-calorie ready-to-drink beverage compn. was prepd. contg. (by wt.) ascorbic acid 0.07%, calcium disodium EDTA 0.003%, calcium hydroxide 0.25%, citric acid 0.63%, erythritol 2.0%, fructose 2.0%, glucosamine-HCl 0.75%, malic acid 0.22%, sodium benzoate 0.002%, sodium CM-cellulose 0.03%, sucralose (25%) 0.03%, xanthan gum 0.006%, juice concs. 2.0%, colors 0.007%, flavor oils 0.04%, and water up to 100%.

IT **22839-47-0, Aspartame**

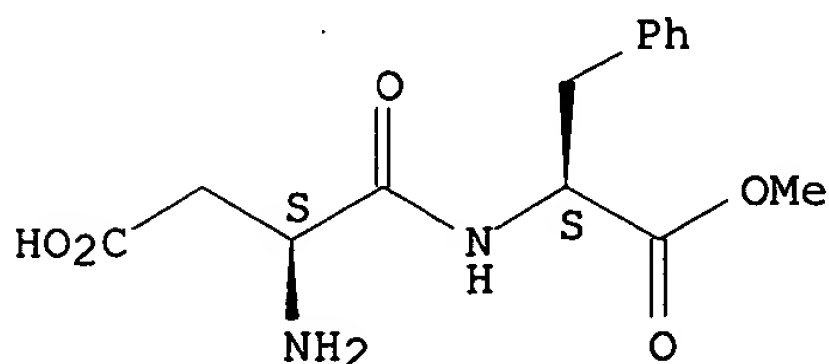
RL: BSU (Biological study, unclassified); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(low carbohydrate compns. and kits for treatment of joint and bone dysfunction, and/or inflammation)

RN 22839-47-0 HCAPLUS

CN L-Phenylalanine, L-.alpha.-aspartyl-, 2-methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 66-84-2, Glucosamine hydrochloride 67-71-0,
Methylsulfonylmethane 81-07-2, Saccharin
29908-03-0

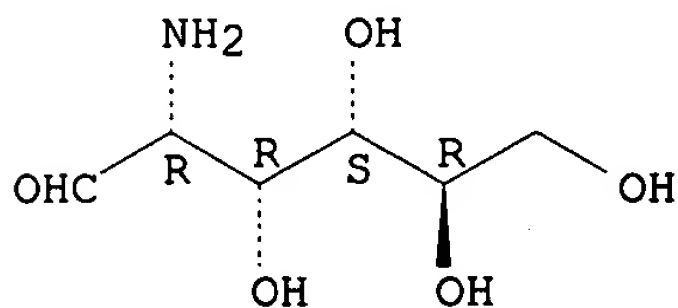
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(low carbohydrate compns. and kits for treatment of joint and bone dysfunction, and/or inflammation)

RN 66-84-2 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, hydrochloride (8CI, 9CI) (CA INDEX NAME)

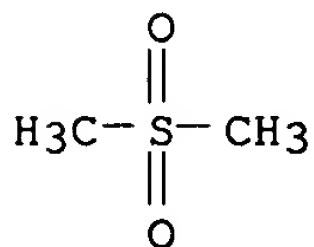
Absolute stereochemistry. Rotation (+).



● HCl

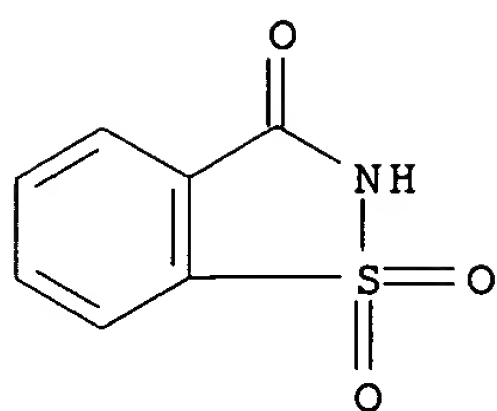
RN 67-71-0 HCAPLUS

CN Methane, sulfonylbis- (9CI) (CA INDEX NAME)



RN 81-07-2 HCAPLUS

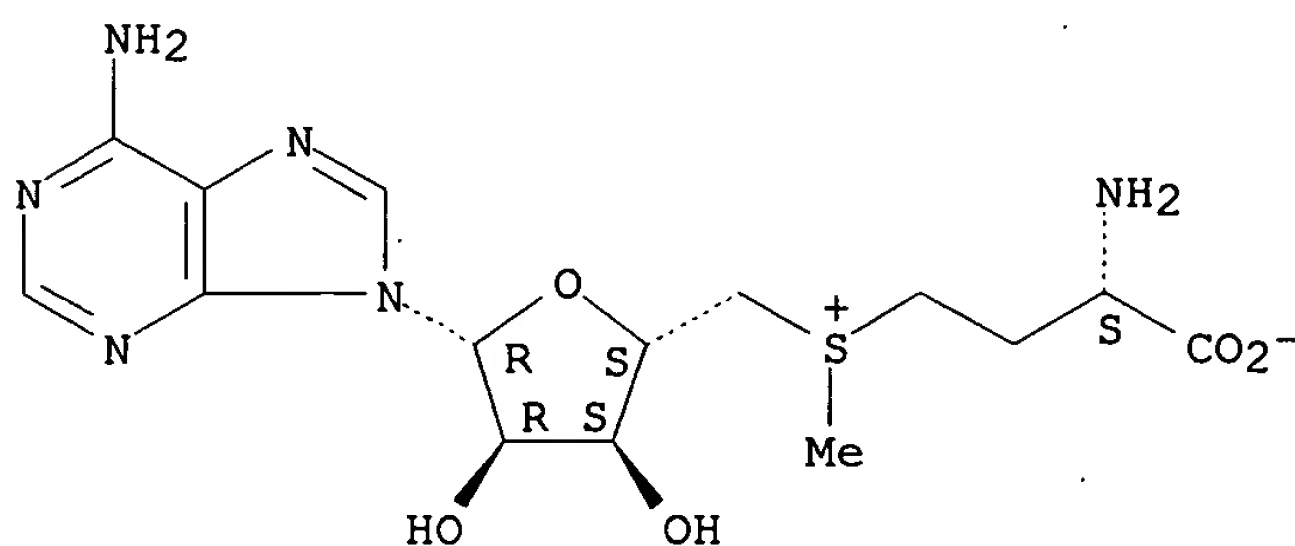
CN 1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide (9CI) (CA INDEX NAME)



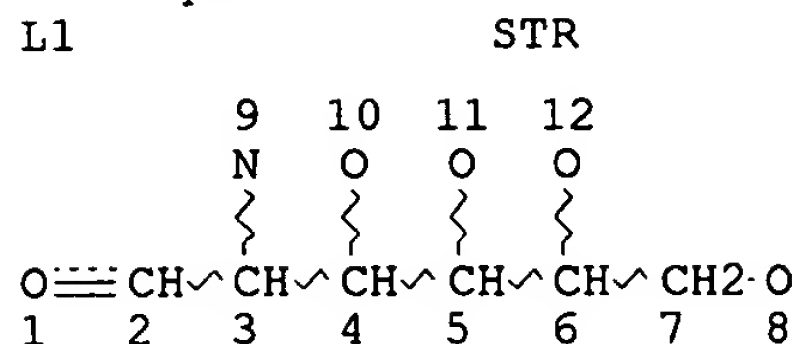
RN 29908-03-0 HCAPLUS

CN Adenosine, 5'-[[(3S)-3-amino-3-carboxypropyl]methylsulfonio]-5'-deoxy-,
inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.



=> d que



NODE ATTRIBUTES:

```

CONNECT IS E1  RC AT   8
CONNECT IS E1  RC AT   9
CONNECT IS E1  RC AT  10
CONNECT IS E1  RC AT  11
CONNECT IS E1  RC AT  12
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

```

GRAPH ATTRIBUTES:

```

RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  12

```

STEREO ATTRIBUTES: NONE

```

L2                      STR

```

Me- \wedge SO₂-Me

```

1   2   3

```

NODE ATTRIBUTES:

```

DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

```

GRAPH ATTRIBUTES:

```

RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS   3

```

STEREO ATTRIBUTES: NONE

```

L3 (      236)SEA FILE=REGISTRY SSS FUL L1
L4 (      88)SEA FILE=REGISTRY SSS FUL L2
L5 (    6254)SEA FILE=HCAPLUS ABB=ON  PLU=ON  L3
L6 (    235)SEA FILE=REGISTRY ABB=ON  PLU=ON  CHONDROITIN?/CN
L7 (    8081)SEA FILE=HCAPLUS ABB=ON  PLU=ON  L6
L8 (    245)SEA FILE=HCAPLUS ABB=ON  PLU=ON  L5 AND ( L7 OR CHONDROITIN?)
L9 (      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  L-METHIONINE, S-ADENOSYL-/CN

L10 (      2)SEA FILE=REGISTRY ABB=ON  PLU=ON  FRUCTOSE/CN
L11 (   21382)SEA FILE=HCAPLUS ABB=ON  PLU=ON  L10
L12 (      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  SUCROSE/CN
L13 (   49029)SEA FILE=HCAPLUS ABB=ON  PLU=ON  L12
L14 (      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  DEXTROSE/CN
L15 (  117738)SEA FILE=HCAPLUS ABB=ON  PLU=ON  L14
L16 (      2)SEA FILE=REGISTRY ABB=ON  PLU=ON  GLUCOSE/CN
L17 (  117829)SEA FILE=HCAPLUS ABB=ON  PLU=ON  L16
L18 (    126)SEA FILE=HCAPLUS ABB=ON  PLU=ON  L8 AND (L4 OR SWEET? OR L9 OR
      GELATIN? OR CARTILAG? OR L17 OR GLUCOSE? OR L15 OR DEXTROSE?
      OR L13 OR SUCROSE? OR L11 OR FRUCTOSE?)

```

L19 (4) SEA FILE=HCAPLUS ABB=ON PLU=ON HEISEY M?/AU
 L20 (249) SEA FILE=HCAPLUS ABB=ON PLU=ON KERN K?/AU
 L21 (79) SEA FILE=HCAPLUS ABB=ON PLU=ON SPENCE K?/AU
 L22 (1) SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND (L19 OR L20 OR L21)
 L23 125 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 NOT L22
 L42 262 SEA FILE=REGISTRY ABB=ON PLU=ON GLUCOSAMIN?/CN
 L43 235 SEA FILE=REGISTRY ABB=ON PLU=ON CHONDROITIN?/CN
 L44 6038 SEA FILE=HCAPLUS ABB=ON PLU=ON L42
 L45 8081 SEA FILE=HCAPLUS ABB=ON PLU=ON L43
 L47 1114 SEA FILE=HCAPLUS ABB=ON PLU=ON (L44 OR GLUCOSAMINE?) AND
 (L45 OR CHONDROITIN?)
 L48 1 SEA FILE=REGISTRY ABB=ON PLU=ON STEVIOSIDE/CN
 L49 687 SEA FILE=HCAPLUS ABB=ON PLU=ON L48
 L50 0 SEA FILE=REGISTRY ABB=ON PLU=ON LO HAN GUO/CN
 L51 0 SEA FILE=HCAPLUS ABB=ON PLU=ON L50
 L52 1 SEA FILE=REGISTRY ABB=ON PLU=ON LACTOSE/CN
 L53 16596 SEA FILE=HCAPLUS ABB=ON PLU=ON L52
 L54 2 SEA FILE=REGISTRY ABB=ON PLU=ON MALTOSE/CN
 L55 9591 SEA FILE=HCAPLUS ABB=ON PLU=ON L54
 L56 0 SEA FILE=REGISTRY ABB=ON PLU=ON MALITOL/CN
 L57 0 SEA FILE=HCAPLUS ABB=ON PLU=ON L56
 L58 1 SEA FILE=REGISTRY ABB=ON PLU=ON ERYTHRITOL/CN
 L59 1995 SEA FILE=HCAPLUS ABB=ON PLU=ON L58
 L60 1 SEA FILE=REGISTRY ABB=ON PLU=ON XYLITOL/CN
 L61 4118 SEA FILE=HCAPLUS ABB=ON PLU=ON L60
 L62 2 SEA FILE=REGISTRY ABB=ON PLU=ON MANNITOL/CN
 L63 11046 SEA FILE=HCAPLUS ABB=ON PLU=ON L62
 L64 1 SEA FILE=REGISTRY ABB=ON PLU=ON SORBITOL/CN
 L65 13343 SEA FILE=HCAPLUS ABB=ON PLU=ON L64
 L66 34 SEA FILE=HCAPLUS ABB=ON PLU=ON L47 AND (L65 OR SORBITOL? OR
 L63 OR MANNITOL? OR L61 OR XYLITOL? OR L59 OR ERYTHRITOL? OR
 L57 OR MALITOL? OR L55 OR MALTOSE? OR L53 OR LACTOSE? OR
 FRUCTOOLIGOSACCHARIDE? OR LO HAN GUO? OR L51 OR L49 OR
 STEVIOSIDE?)
 L67 3 SEA FILE=REGISTRY ABB=ON PLU=ON RIBOSE/CN
 L68 4144 SEA FILE=HCAPLUS ABB=ON PLU=ON L67
 L69 1 SEA FILE=REGISTRY ABB=ON PLU=ON ISOMALT/CN
 L70 273 SEA FILE=HCAPLUS ABB=ON PLU=ON L69
 L71 1 SEA FILE=REGISTRY ABB=ON PLU=ON LEVULOSE/CN
 L72 21375 SEA FILE=HCAPLUS ABB=ON PLU=ON L71
 L73 1 SEA FILE=REGISTRY ABB=ON PLU=ON ARABINOSE/CN
 L74 4265 SEA FILE=HCAPLUS ABB=ON PLU=ON L73
 L75 2 SEA FILE=REGISTRY ABB=ON PLU=ON XYLOSE/CN
 L76 10216 SEA FILE=HCAPLUS ABB=ON PLU=ON L75
 L77 1 SEA FILE=REGISTRY ABB=ON PLU=ON SACCHARIN/CN
 L78 3239 SEA FILE=HCAPLUS ABB=ON PLU=ON L77
 L79 1 SEA FILE=REGISTRY ABB=ON PLU=ON SUCRALOSE/CN
 L80 292 SEA FILE=HCAPLUS ABB=ON PLU=ON L79
 L81 1 SEA FILE=REGISTRY ABB=ON PLU=ON ASPARTAME/CN
 L82 2256 SEA FILE=HCAPLUS ABB=ON PLU=ON L81
 L83 1 SEA FILE=REGISTRY ABB=ON PLU=ON ACESULFAME/CN
 L84 138 SEA FILE=HCAPLUS ABB=ON PLU=ON L83
 L85 71 SEA FILE=HCAPLUS ABB=ON PLU=ON L47 AND (L84 OR ACESULFAME?
 OR L82 OR ASPARTAME? OR L80 OR SUCRALOSE? OR SACCHARIN? OR L78
 OR L76 OR XYLOSE? OR L74 OR ARABINOSE? OR L72 OR LEVULOSE? OR
 L70 OR ISOMALT? OR L68 OR RIBOSE?)
 L86 89 SEA FILE=HCAPLUS ABB=ON PLU=ON L66 OR L85

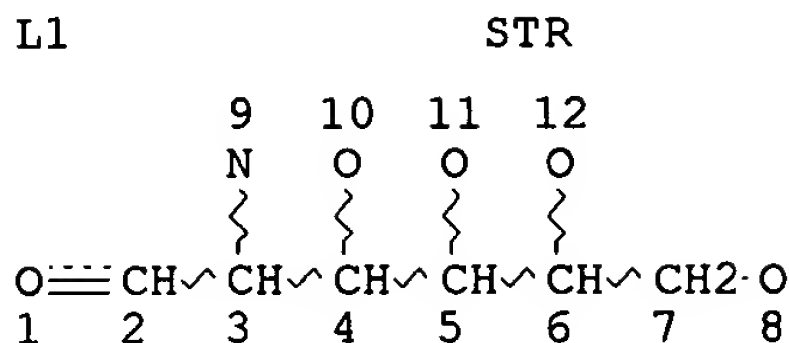
09/759,965

February 4, 2002

L87

54 SEA FILE=HCAPLUS ABB=ON PLU=ON L86 NOT L23

=> d que



NODE ATTRIBUTES:

CONNECT IS E1 RC AT 8
CONNECT IS E1 RC AT 9
CONNECT IS E1 RC AT 10
CONNECT IS E1 RC AT 11
CONNECT IS E1 RC AT 12
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE

L2 STR

Me-CH2-SO2-Me

1 2 3

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 3

STEREO ATTRIBUTES: NONE

L4 236 SEA FILE=REGISTRY SSS FUL L1
L6 88 SEA FILE=REGISTRY SSS FUL L2
L7 6254 SEA FILE=HCAPLUS ABB=ON PLU=ON L4
L8 235 SEA FILE=REGISTRY ABB=ON PLU=ON CHONDROITIN?/CN
L9 8081 SEA FILE=HCAPLUS ABB=ON PLU=ON L8
L10 245 SEA FILE=HCAPLUS ABB=ON PLU=ON L7 AND (L9 OR CHONDROITIN?)
L11 1 SEA FILE=REGISTRY ABB=ON PLU=ON L-METHIONINE, S-ADENOSYL-/CN

L12 2 SEA FILE=REGISTRY ABB=ON PLU=ON FRUCTOSE/CN
L13 21382 SEA FILE=HCAPLUS ABB=ON PLU=ON L12
L14 1 SEA FILE=REGISTRY ABB=ON PLU=ON SUCROSE/CN
L15 49029 SEA FILE=HCAPLUS ABB=ON PLU=ON L14
L16 1 SEA FILE=REGISTRY ABB=ON PLU=ON DEXTROSE/CN
L17 117738 SEA FILE=HCAPLUS ABB=ON PLU=ON L16
L18 2 SEA FILE=REGISTRY ABB=ON PLU=ON GLUCOSE/CN
L19 117829 SEA FILE=HCAPLUS ABB=ON PLU=ON L18
L20 126 SEA FILE=HCAPLUS ABB=ON PLU=ON L10 AND (L6 OR SWEET? OR L11
OR GELATIN? OR CARTILAG? OR L19 OR GLUCOSE? OR L17 OR DEXTROSE?

glucosamine and chondroitin and
(sweet? or cartilage or Me-SO₂-Me or
SAmE or glucose or sucrose or dextrose or
fructose)

09/759,965

February 4, 2002

OR L15 OR SUCROSE? OR L13 OR FRUCTOSE?)

L21	4	SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	HEISEY M?/AU
L22	249	SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	KERN K?/AU
L23	79	SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	SPENCE K?/AU
L24	1	SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	L20 AND (L21 OR L22 OR L23)
L25	125	SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	L20 NOT L24

L24 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2002 ACS

AN 2001:903816 HCAPLUS

DN 136:42843

TI Compositions, kits, and methods for promoting defined health benefits

IN Kern, Kenneth Norman; Heisey, Matthew Thomas

PA The Procter + Gamble Company, USA

SO PCT Int. Appl., 45 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	WO 2001093847	A2	20011213	WO 2001-US17714	20010601
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			

PRAI US 2000-586213 A 20000602

US 2001-760280 A 20010112

AB The present invention is directed to compns. comprising: (a) a first component selected from the group consisting of **gelatin**, **cartilage**, amino sugars, glycosaminoglycans, methylsulfonylmethane, precursors of methylsulfonylmethane, S-adenosylmethionine, salts and mixts.; and (b) a second component comprising a cation source selected from the group consisting of calcium, potassium, magnesium, and mixts. and an edible acid source. The present invention is further directed to food, beverage, pharmaceutical, over-the-counter, and dietary supplement products, which comprise the present compns. The invention also relates to kits comprising the present compns. and information that use of the compn. promotes one or more of the presently defined health benefits, including joint health, bone health, cardiac health, and anti-inflammation. The present invention addnl. relates to methods of treating joint function, bone function, cardiac function, or inflammation comprising administering to a mammal a compn. as defined herein. Thus, hard lemon candies are prepd. by combining the following components as indicated: sugar 200, light corn syrup 63, water 60, lemon flavor glucosamine-HCl 16, and calcium citrate malate 14.9 g.

IT 66-84-2, Glucosamine hydrochloride 67-71-0,
Methylsulfonylmethane 9007-28-7, Chondroitin sulfate
29031-19-4, Glucosamine sulfate 29908-03-0
216699-44-4

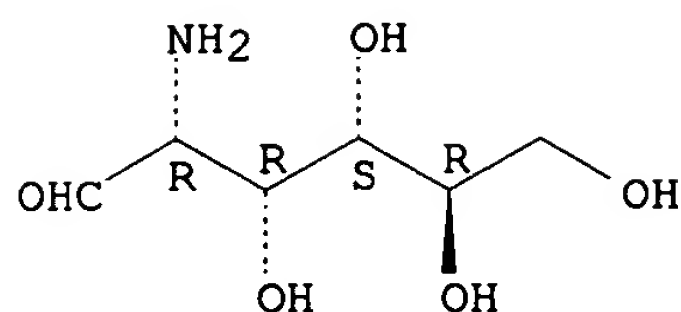
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(compns. and kits for promoting defined health benefits)

RN 66-84-2 HCAPLUS

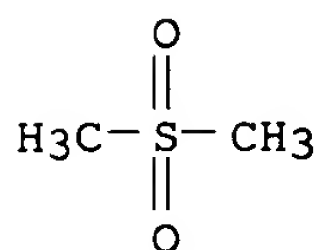
CN D-Glucose, 2-amino-2-deoxy-, hydrochloride (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



● HCl

RN 67-71-0 HCAPLUS
CN Methane, sulfonylbis- (9CI) (CA INDEX NAME)



RN 9007-28-7 HCAPLUS
CN Chondroitin, hydrogen sulfate (9CI) (CA INDEX NAME)

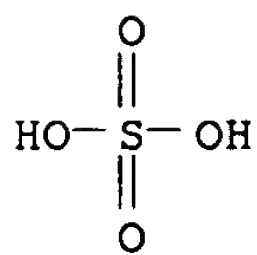
CM 1

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

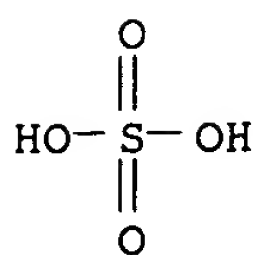
CRN 7664-93-9
CMF H2 O4 S



RN 29031-19-4 HCAPLUS
CN D-Glucose, 2-amino-2-deoxy-, sulfate (salt) (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 7664-93-9
CMF H2 O4 S

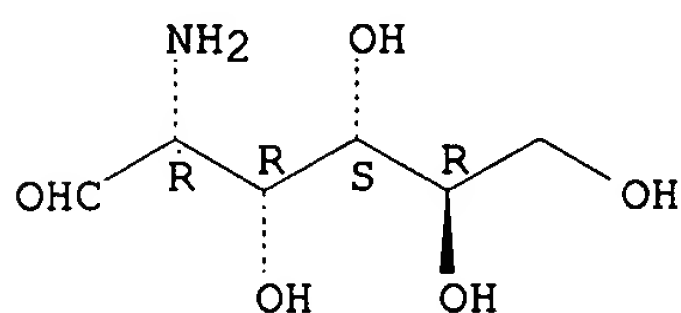


CM 2

CRN 3416-24-8

CMF C6 H13 N O5

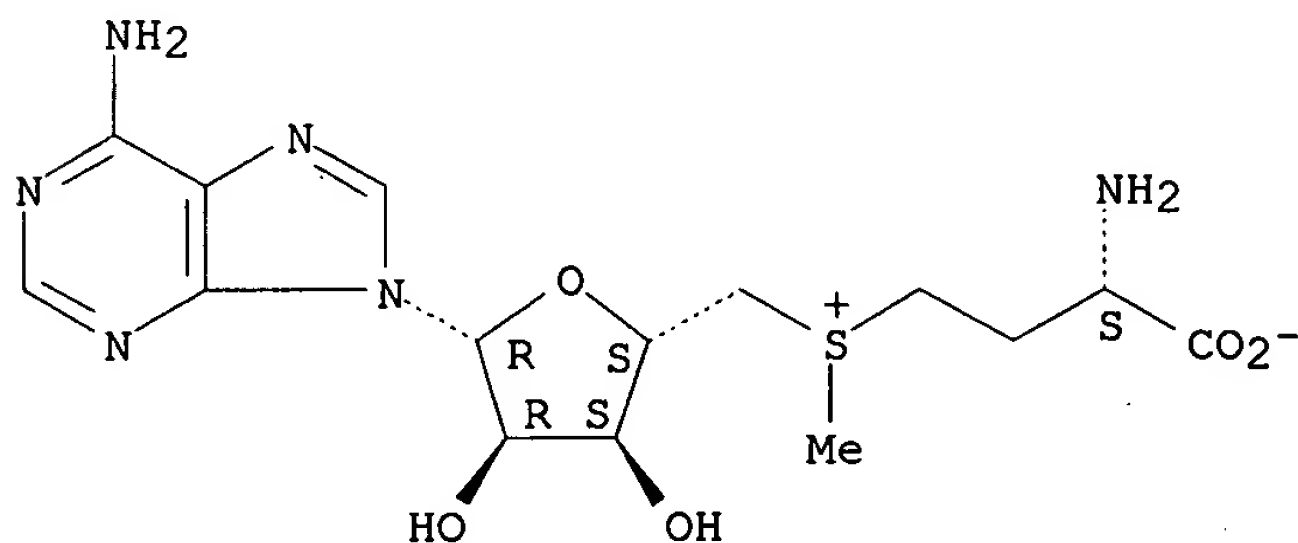
Absolute stereochemistry. Rotation (+).



RN 29908-03-0 HCAPLUS

CN Adenosine, 5'-[[(3S)-3-amino-3-carboxypropyl]methylsulfonio]-5'-deoxy-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 216699-44-4 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, sulfate (salt), compd. with potassium chloride (KCl) (2:1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 7447-40-7

CMF Cl K

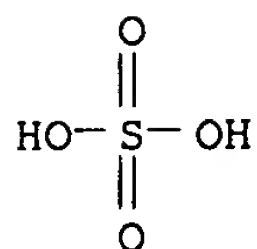
Cl-K

CM 2

CRN 14999-43-0
CMF C6 H13 N O5 . 1/2 H2 O4 S

CM 3

CRN 7664-93-9
CMF H2 O4 S



CM 4

CRN 3416-24-8
CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

